

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/069837 A3

(51) International Patent Classification:
A61F 2/02 (2006.01)

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, ÉB, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW.

(21) International Application Number:
PCT/US2005/001138

(22) International Filing Date: 13 January 2005 (13.01.2005)

(25) Filing Language:

English

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language:

English

(30) Priority Data:

60/535,802 13 January 2004 (13.01.2004) US

(71) Applicant (*for all designated States except US*): ROYER BIOMEDICAL, INC. [US/US]; 4580F Mack Avenue, Frederick, MD 21703 (US).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): ROYER, Garfield, P. [US/US]; 4580F Mack Ave., Frederick, MD 21703 (US).

(74) Agent: DAVIDSON, Bryan, H.; Nixon & Vanderhye P.C., 901 North Glebe Road, Arlington, VA 22203 (US).

(88) Date of publication of the international search report:

15 March 2007

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 2005/069837 A3

(54) Title: NON-AQUEOUS COMPOSITIONS FOR TREATMENT OF ORTHOPEDIC DEFECTS AND DELIVERY OF BIOACTIVE AGENTS

(57) Abstract: This invention relates to non-aqueous compositions for drug delivery and compositions, which can take the place of bone. The non-aqueous, ready-to-use cement is comprised of the following: an inorganic salt capable of hydration and precipitation such as calcium sulfate or phosphate salt, an organic polymer such as ethyl cellulose, and a non-aqueous solvent such as N-methylpyrrolidone.